

GREAT BASIN MINE WATCH ET AL.

IBLA 96-307, 97-506, 97-510

Decided November 9, 1998

Consolidated appeals from separate decisions of the Nevada State Office, Bureau of Land Management, first authorizing a mining plan of operations and subsequently approving a plan amendment thereto. N64-93-0001P; NV64-EIS92-36 (97-3A).

Decisions affirmed.

1. Administrative Authority: Generally—Environmental Quality: Generally—Mining Claims: Plan of Operations—Mining Claims: Determination of Validity

In determining the validity of a mining claim, the cost of compliance with environmental laws of general applicability must be included in determining whether or not the mining claim is supported by a discovery of a valuable mineral deposit. Similarly, where a plan of operations is submitted to BLM for its approval, the fact that compliance with environmental laws of general applicability will make mining uneconomic generally provides no basis for excusing such compliance.

2. Environmental Quality: Generally—Mining Claims: Plan of Operations

Where the evidence establishes that an Environmental Impact Statement prepared to analyze a proposed plan of operations fairly identified and considered all impacts reasonably likely to result from implementation of the plan of operations, a challenge to the approval of the plan will be denied.

3. Environmental Quality: Generally—Mining Claims: Plan of Operations

An appeal challenging the approval of an amendment to a plan of operations on the ground that it inadequately considered the impacts likely to result from implementation of the amended plan will be denied where the record establishes that these impacts were considered in an Environmental Impact Statement issued in connection with the original plan of operations.

APPEARANCES: Glenn C. Miller, Chair, Great Basin Mine Watch, Reno, Nevada, for appellant Great Basin Mine Watch; Robert Tuchman, Esq., Denver, Colorado, for Cortez Gold Mines; Jack Orr, Chairman, Western Shoshone Resources, Inc., for appellant Western Shoshone Resources, Inc.; Charles A. Jeannes, Esq., Vancouver, British Columbia, for Intervenor Placer Dome U.S., Inc.; John W. Steiger, Esq., Office of the Field Solicitor, U.S. Department of the Interior, Salt Lake City, Utah, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE BURSKI

On March 4, 1996, the Nevada Associate State Director, Bureau of Land Management (BLM), approved a record of decision authorizing a mining plan of operations submitted by Cortez Gold Mines (Cortez) for the Cortez Pipeline Gold (Pipeline) deposit, based on a Final Environmental Impact Statement (FEIS) issued on February 2, 1996. Great Basin Mine Watch (GBMW) thereupon filed a notice of appeal (docketed as IBLA 96-307) and a petition seeking a stay in implementation of the Associate State Director's decision. ^{1/} By Order dated June 7, 1996, this Board denied the petition for stay based on its conclusion that GBMW had generally failed to establish a likelihood of ultimate success on appeal with respect to the four issues which it had raised therein. See Order of June 7, 1996, at 3-8.

Subsequently, on June 17, 1997, while the first appeal was awaiting further substantive consideration, BLM approved a plan amendment to the Pipeline plan of operations designed to address problems that had developed with pit dewatering which would permit Cortez to construct and operate an additional 70 infiltration basins aggregating 235 surface acres on public and private land. Appeals and petitions for a stay of this order were filed by both GBMW (IBLA 97-506) and WSRI (IBLA 97-510). By Order dated September 24, 1997, the Board again denied the requested stays, this time noting that the balance of harms did not incline in favor of a stay. See Order of September 24, 1997, at 2-3.

Thereafter, on March 3, 1998, Cortez filed a motion with the Board seeking expedited consideration of these appeals. In support thereof, Cortez recounted various difficulties which had developed with respect to the pit dewatering system for the Pipeline mine which had, as of that date, resulted in the presence of approximately 8 to 10 feet of water in the pit and caused the cessation of all mining on the lower benches. After noting that BLM had taken the position that further plan amendments could not be approved until the Board had ruled on earlier appeals relating to the Pipeline mine plan and its amendments, Cortez requested that the Board either expedite consideration of the pending appeals or remand the matter

^{1/} Great Basin Mine Watch is essentially an umbrella group whose membership includes Western Shoshone Resources, Inc. (WSRI), Citizen Alert Native American Program, and the Toiyabe Chapter of the Sierra Club. See Notice of Appeal, dated April 1, 1996, at 1.

to BLM to permit it to consider any new amendments which Cortez might desire to make to the Pipeline mine plan. The request to expedite consideration was, to a greater or lesser extent, ultimately supported by all of the other parties to the appeals.

By Order dated March 25, 1998, this Board granted the motion to expedite consideration. In doing so, however, the Board noted that, in view of the complexity of some of the issues involved it was unlikely that an immediate decision would be forthcoming. Accordingly, the Board restored jurisdiction over the subject matter of these appeals to the Nevada State Office to permit it to consider any further amendments to the Pipeline mine plan which Cortez might propose. To date, however, the Board has not been informed of any further action and it deems it appropriate to proceed to decide the matters which presently pend before it. Accordingly, we will address these consolidated appeals in the order in which they have been filed with the Board.

In the Board's Order of June 7, 1996, we noted that the arguments presented in GBMW's petition for stay (which replicated arguments made in its statement of reasons in support of its appeal (SOR)) generally could be subsumed into four categories:

- (1) issues relating to Native American concerns;
- (2) challenges to the adequacy of the FEIS discussion of cumulative impacts associated with development of the South Pipeline deposit;
- (3) sufficiency of the FEIS analysis with respect to pit dewatering, including its possible impact on the Humboldt River basin, and
- (4) the adequacy of the FEIS analysis of the extent and possible amelioration of impacts projected for the pit lake and the heaps and waste rock dumps after mine closure.

(Order of June 7, 1996, at 3.)

The Order then proceeded to analyze the substantive validity of GBMW's concerns. In our view, the Order provided a more than adequate basis for rejection of GBMW's first three grounds for appeal and we therefore set out that discussion and adopt it as the decision of the Board on those issues:

Insofar as the first category is concerned, we find that petitioner has established little, if any, likelihood of success. To the extent that it advances arguments relating to the Western Shoshone's claim of ownership of the land based on the 1869 Treaty of Ruby Valley, 18 Stat. 689, Board consideration of their assertions is clearly foreclosed by the Ninth Circuit's decision in United States v. Dann, 873 F.2d 1189, 1200 (1989), cert. denied, 493 U.S. 890 (1990). With respect to GBMW's generalized claim that the decision violated the Western Shoshone's religious beliefs, we merely note that our review of the record, in light of the recent Board decision in The Klamath Tribes, 135 IBLA 192 (1996), fails to disclose any reasonable basis for overturning the decision below.

Turning to petitioner's assertions with respect to the adequacy of the FEIS's discussion of [the] South Pipeline deposit, petitioner argues that the development of the South Pipeline deposit should not have been treated merely as a cumulative impact. Petitioner takes the position that the eventual development of the South Pipeline deposit should be viewed as merely the second phase of a unitary development scheme and that, by failing to require Placer [2/] to submit its development plans in the context of this FEIS, BLM has improperly bifurcated consideration of environmental impacts. Based on our review of the record, we believe it unlikely that GBMW will ultimately succeed with respect to this issue.

The prohibition against segmented consideration of a proposed project which should be considered as a whole, an issue which generally arises with respect to the construction of a highway, proceeds from two separate considerations. Thus, in John A. Nejedly, 80 IBLA 14 (1984), we noted that:

The problem with the segmentation of a project, e.g., a highway, is twofold. First while separate EIS's [Environmental Impact Statements] of distinct segments of a project may adequately address the individual impact of each segment, the cumulative impact of all of the segments may not be addressed at all. Second, the decision with respect to one segment may well predetermine additional segments such that an EIS with respect to the latter segments is a mere formality.

Id. at 18 (emphasis in original; citations omitted).

The problem with appellant's argument, however, is that it assumes a critical prerequisite, *viz.*, that the proposed plan of operations to mine the Pipeline deposit and a possible future proposal to mine the South Pipeline deposit are part of a single unified project for NEPA [National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-47 (1994)] purposes.

There is, of course, no question that eventual development of the South Pipeline deposit, should it occur, will, because of its physical proximity to the proposed Pipeline mine, utilize many of the facilities slated for construction at the Pipeline mine site. This does not, however, *ipso facto*, make the possible future development of the South Pipeline deposit part of a single project for purposes of NEPA. A key consideration in determining whether a project has been improperly segmented "is whether the projects have independent utility." Dickman v. City of Santa Fe, 724 F.Supp. 1341, 1346 (D.N.M. 1989). See also Swain v. Brinegar, 542 F.2d 365 (7th Cir. 1976). In other words, is there sufficient justification, independent of the

^{2/} Placer Dome U.S., Inc. (Placer), the manager of Cortez Gold Mines, has intervened in this appeal.

other projects, for construction of each individual project such that the failure to proceed with one would not, in and of itself, preclude completion of the others? In the context of a mining plan of operations, we believe that where the development proposed in a plan of operations is capable of being independently pursued, the possibility, or even likelihood, that nearby areas will subsequently be developed does not cause the eventual development of those areas to become part of a single project for the purpose of NEPA analysis.

Petitioner does not suggest that, but for the South Pipeline deposit, Placer would not be opening the Pipeline mine. On the contrary, the record indicates that the South Pipeline deposit was discovered in the course of exploration activities conducted subsequent to the submission of the plan of operations for the Pipeline mine. See Intervenor's Response at 2-3. Nor does petitioner even allege that the economic viability of the Pipeline mine is dependent upon the eventual mining of the South Pipeline deposit, should that come to pass. Petitioner's essential argument is that because successful exploitation of the South Pipeline deposit would follow sequentially the mining of the Pipeline deposit, this is a single project for NEPA purposes. But petitioner has presented no evidence that Intervenor would not be pursuing this plan of operations in the absence of the South Pipeline deposit nor has it made any showing how approval of this plan of operations predetermines any eventual action on a separate plan of operations for the South Pipeline deposit should one be submitted in the future. The mining of each deposit can clearly stand or fall on its own and intervenor's opening of the Pipeline mine in no way necessarily presages eventual approval of operations on the South Pipeline deposit. There is, in short, no question as to the "independent utility" of the two activities.

This, of course, is not to say that the reasonably anticipated effects of mining the South Pipeline deposit are not properly considered in the confines of the FEIS for the Pipeline mine. Such effects clearly must be analyzed within the confines of the environmental analysis of cumulative impacts of reasonably foreseeable future developments. And, in point of fact, they were. See FEIS at 5-7, 5-15 to 5-18; Figure 5.2-1. What petitioner seeks to require is that all consideration of the Pipeline mine plan of operation be suspended until Intervenor submits an additional plan of operations for the South Pipeline deposit. In the absence, however, of a showing that development of the Pipeline mine is dependent upon the subsequent development of the South Pipeline deposit, there is simply no basis for the imposition of such a requirement. It goes without saying that, should Intervenor ultimately decide to pursue development of the South

Pipeline deposit, a new mining plan of operations must be submitted for that deposit and any ensuing environmental analysis would necessarily take into account the cumulative and synergistic effects of developing the South Pipeline deposit in view of the other ongoing mining enterprises in the area. Suffice it for the present to note that petitioner has failed to show a reasonable likelihood of success in its contention that BLM should refuse to approve a plan of operations for the Pipeline mine until such time as a plan of operations of the South Pipeline deposit was formally presented.

The next category of issues to be examined relates to the sufficiency of the FEIS analysis of impacts on water resources which might occur under the plan of operations. Suffice it for our present purposes to note that, while the petition asserts that the FEIS inadequately examines the cumulative impact of dewatering projects on the Humboldt River system, the FEIS, in actuality, examined this question and concluded that "[s]ince there are expected to be no direct or indirect impacts to the Humboldt River resulting from the Pipeline project, the Pipeline project would not contribute to any direct or cumulative impacts on the Humboldt River." FEIS at 4-25. Petitioner is certainly free to disagree with this assessment but, absent some evidentiary proffer, there is little likelihood of ultimate success in having its position sustained on appeal.

A similar infirmity relates to petitioner's complaint that the effects of mine dewatering generally have been inadequately examined. We note that the FEIS dealt in considerable detail both with the process by which the dewatering was to occur as well as the perceived likely effects, both short-run and long-run. See, e.g., FEIS at 2-11 to 2-18, 4-15 to 4-26, 4-37 to 4-38, 5-15 to 5-18. Petitioner asserts that "[a]dditional wells need to be drilled and monitored to monitor groundwater around the pit, around the recharge areas and at the base of the waste rock dumps," arguing that "[w]ithout these monitoring wells, allowing the project to move forward will have a high probability of causing long-term impacts on the surrounding groundwater resource * * * [which] will not be known for years or decades." Petition at 4. Petitioner, however, totally fails to delineate where it wishes more monitoring wells or to provide a scientific basis for why it believes they are necessary. It is unlikely that petitioner will ultimately succeed on this issue.

(Order of June 7, 1996, at 3-6 (footnote omitted).) We have reexamined the foregoing analysis and find that appellant GBMW has failed to carry its burden of showing error in the decision below with respect to all three of these arguments.

The June 7 Order noted, however, that the final issue, which involved the question of the likely impacts and prescribed mitigation measures relating to the pit lake and waste dumps projected to remain after mine

closure, posed a closer question. In order to provide a decisional framework for our analysis of this issue herein, we will set out our previous discussion of this issue:

Finally, petitioner challenges the post-closure plans which will result in leaving the pit partially filled with water and also raises questions concerning the post-closure risks posed by the heaps and waste rock dumps. With respect to this latter question, petitioner assails reliance on the Meteoric Water Mobility Test (MWMT) on the grounds that its use as a predictive test has never been validated by any State or Federal agency, asserting that "[s]imply because the State of Nevada has used it previously is not sufficient for the federal agency to adopt it." Petition at 5. Petitioner baldly asserts that "[w]hile the Department of the Interior places the burden of proof on the appellants to demonstrate why a stay should be granted, the Department of the Interior has the burden of demonstrating that techniques to assess contamination are valid." *Id.* Petitioner, however, provides no support for this assertion.

BLM has responded by noting that the State of Nevada has been granted primacy by the Environmental Protection Agency for implementation of the Clean Water Act and that the MWMT is the current standard required by the State. BLM Response at 9. Absent some contraindications by petitioner, there seems little likelihood that it will be successful on the merits of its challenge to the use of the MWMT in the FEIS for predictive modelling purposes.

Insofar as the post-closure pit lake is concerned, the FEIS admits that hydrogeochemical models have only limited utility for the purpose of making accurate or precise quantitative predictions of future metals concentrations and, accordingly, the estimated metal concentrations must be "interpreted as general approximations having considerable potential for error, both positive and negative." FEIS at 4-34. Notwithstanding the foregoing, the FEIS estimates that water quality of the pit lake after 100 years will exceed the Nevada State drinking water standards for fluoride and total dissolved solids (TDS) and after 250 years will exceed the standards for sulfate, cadmium, manganese, and mercury, in addition to fluoride and TDS, and will also evidence a pronounced increase in alkalinity. *See* FEIS at 4-85 (Table 4.4-5). The declining quality of the water in the pit lake is related to surface evaporation from the lake, estimated to occur at the rate of 361 acre-feet per year, which results, through the passage of time, in the concentration in the lake water of the constituent elements found in the inflowing water. While the FEIS indicates that the lake is not intended to provide a water resource for humans or livestock or for recreational purposes, it recognizes that a significant risk may be present that the elevated constituent elements of the pit lake might negatively impact adjacent groundwaters, in violation of Nevada law.

The mitigation measures proposed for this problem consist both of monitoring and the eventual establishment of an interest-earning contingency fund totalling \$1,250,000 for the purpose of long-term (30 year) monitoring and, if necessary, providing remediation of any long-term unfavorable environmental impacts. See FEIS at 2-39 to 2-40. Petitioner, however, challenges the sufficiency of the fund to finance remedial activities which might be needed, asserting that any real effort to deal with the degraded quality of the pit lake would cost considerably more than any amount likely to be found in the contingency fund.

The issue of ultimate pit lake quality and the adequacy of BLM's efforts to deal with it is one of considerable uncertainty. Indeed, the FEIS itself recognizes that "inherent uncertainty exists and there is potential for significant impacts." FEIS at 4-39. But, while it is not beyond the realm of possibility that petitioner may prove ultimately successful in challenging the sufficiency of the mitigation measures designed to deal with this problem, we do not believe the record before the Board would justify a stay at this time. To the extent that petitioner might ultimately prove successful in establishing that the fund was undercapitalized, this matter could be timely dealt with by the Board in its decision on the merits, since it involves post-mining activities which are not particularly time-sensitive. Moreover, as we noted above, any party who proceeds in the face of an administrative appeal does so at its own risk and a substantive decision by this Board which might require augmentation of the contingency fund is an eventuality of which Intervenor was necessarily cognizant in pursuing the course of action which it chose. Thus, a denial of a stay would not preclude the imposition of any remedy which the Board deemed appropriate should petitioner ultimately succeed on the merits. Accordingly, we find that any possibility of success which petitioner may have in relation to this ground is insufficient to support issuance of a stay at this time.

(Order of June 7, 1996 at 6-8 (footnotes omitted).)

As the foregoing part of the June 7 Order indicates, there are substantial uncertainties surrounding the pit lake which will remain after the cessation of mining activities. Such uncertainties, however, are endemic to any endeavor which seeks to determine the likely environmental construct 250 years into the future. In such situations, absolute certainty cannot be and is not required. What is required, however, is that BLM examine a proposed plan and fairly analyze both the plan's potential for adverse environmental impacts and the reasonableness and desirability of possible actions designed to ameliorate or mitigate any potential adverse effects. So long as an environmental analysis, be it an Environmental Assessment or an EIS, fairly examines these questions, it fulfills the informational goals of NEPA. Whether or not the instant environmental analysis meets these requirements in its discussion of the plan's proposal to leave a postmining pit lake is the question to which we now turn.

[1] Initially, however, we wish to comment on a statement made by BLM in its Answer to appellant's SOR. In response to a suggestion by GBMW that BLM should have either returned the mining plan of operations to Cortez unapproved or required Cortez to supplement its filings, BLM declared:

Since returning the plan of operations and demanding Cortez provide information on the South Pipeline is not provided for in its regulations, further discussion (returning the plan) by the BLM on this issue is not warranted. In addition, the Mining Law of 1872, as amended and the 43 CFR 3809 regulations provide mining proponents on Public lands the right to mine. As long as the BLM ensures compliance with its 43 CFR 3809 regulations and "undue or unnecessary degradation" is prohibited, the BLM must process and permit a plan of operations filed by a proponent.

(Answer at 10.) In our view, this declaration both overstates the rights of "mining proponents" and understates the authority of BLM.

First of all, the mere filing of a plan of operations by a holder of a mining claim invests no rights in the claimant to have any plan of operations approved. Rights to mine under the general mining laws are derivative of a discovery of a valuable mineral deposit and, absent such a discovery, denial of a plan of operations is entirely appropriate. This, in fact, was the express holding in Southwest Resource Council, 96 IBLA 105, 123-23, 94 I.D. 56, 67 (1987). See also Robert L. Mendenhall, 127 IBLA 73 (1993); Southern Utah Wilderness Alliance, 125 IBLA 175, 188-89, 100 I.D. 15, 22 (1993).

Moreover, in determining whether a discovery exists, the costs of compliance with all applicable Federal and State laws (including environmental laws) are properly considered in determining whether or not the mineral deposit is presently marketable at a profit, i.e., whether the mineral deposit can be deemed to be a valuable mineral deposit within the meaning of the mining laws. See, e.g., United States v. Pittsburgh Pacific Co., 30 IBLA 388, 405, 84 I.D. 282, 290 (1977), aff'd sub nom. South Dakota v. Andrus, 614 F.2d 1190 (8th Cir.), cert. denied 449 U.S. 822 (1980); United States v. Kosanke Sand Corp. (On Reconsideration), 12 IBLA 282, 298-99, 80 I.D. 538, 546-47 (1973). If the costs of compliance render the mineral development of a claim uneconomic, the claim, itself, is invalid and any plan of operations therefor is properly rejected. Under no circumstances can compliance be waived merely because failing to do so would make mining of the claim unprofitable. Claim validity is determined by the ability of the claimant to show that a profit can be made after accounting for the costs of compliance with all applicable laws and, where a claimant is unable to do so, BLM must, indeed, reject the plan of operations and take affirmative steps to invalidate the claim by filing a mining contest.

Finally, insofar as BLM has determined that it lacks adequate information on any relevant aspect of a plan of operations, BLM not only has the authority to require the filing of supplemental information, it has the obligation to do so. We emphatically reject any suggestion that BLM must limit its consideration of any aspect of a plan of operations to the information or data which a claimant chooses to provide.

[2] Notwithstanding the foregoing, however, our analysis of the substance of appellant's complaints in the context of the extensive record developed below convinces us that it has failed to substantiate either its assertion that approval of the plan of operations countenanced violations of State and Federal laws relating to water quality or its claim that the FEIS inadequately analyzed the environmental impacts likely to result from the pit lake.

In its SOR, appellant argued, inter alia, that:

The lake formed at the pit will be large, and, particularly when combined with the expanded South Pipeline project, is likely to have very poor water quality. The present methods for assessing the water quality in pits have never been validated and the water quality in the pit lake threatens avian and terrestrial wildlife, in addition to offering the clear potential for contamination of groundwater. These are both violations of Nevada state law.

(SOR at 15.)

The main thrust of appellant's argument on this point is directed to the pit lake. ^{3/} As noted above, the pit lake was the topic of extensive analysis in the FEIS. Among the conclusions reached was that, because of the likely increase in contaminate concentrations caused by the effects of evaporation over a period of years, the pit lake might pose a danger to both avian and terrestrial wildlife unless steps were taken to mitigate some of the possible adverse effects. Given the fact that final configuration of the pit lake would not be determined until closure, the FEIS did not direct that specific steps be taken. However, it did note that consideration would be given both to the elimination of any littoral area around the lake and the active prohibition of lake stocking as mechanisms for minimizing adverse impacts, particularly on avian species. See FEIS 4.4.5-6 and FEIS 4.6.3.5.

Insofar as the asserted violations of Nevada laws are concerned, BLM points out that this issue was raised by appellant in comments to the draft EIS. See FEIS, Vol. II at I-7, I-8. In response to these comments, the FEIS pointed out that infiltration of water which does not meet State drinking standards is not prohibited unless such infiltration degrades water which had previously met those standards. ^{4/} See FEIS, Vol. II

^{3/} While appellant also raises this argument with respect to the infiltration wells, it should be noted that generally, absent some problematic event, the mere act of returning water to the alluvial or bedrock aquifers would not be seen as having great potential to "degrade" the waters of the aquifer to which it was being returned.

^{4/} In this regard, we note that baseline samples of both the alluvial and bedrock groundwater quality were taken in preparation of the FEIS. The results are displayed in Table 3.4-6 (Alluvial aquifer baseline) and Table 3.4-7 (Bedrock aquifer baseline). While none of the average concentrations exceeded drinking standards for the alluvial aquifer baseline, standards

at I-29 to I-30. Moreover, we would point out that the Nevada Administrative Code expressly recognizes that the State may exempt a body of water from these standards under certain circumstances. See NAC 445.4242 (1998). ^{5/} Finally, we note that the Division of Water Resources, Department of Conservation and Natural Resources, State of Nevada, declared that, subject to the caveat that any water appropriation in excess of 30,000 gpm would require Cortez to file for additional water rights, "the Division of Water Resources supports the proposal as written." (FEIS, Vol. II at B-3.) Based on all of these factors, we find that GBMW has failed to establish that approval of the Pipeline plan of operations violated State or Federal water quality standards.

Turning to the issue of the adequacy of the \$1,250,000 contingency fund established to deal with long-term monitoring and possible remediation, we noted in our Order of June 7, 1996, that appellant had challenged the sufficiency of the amount set aside. However, while GBMW argues that there is insufficient money in the fund because "the \$1.25 million interest-bearing trust fund cannot be expected to cover 280 years of monitoring and subsequent mitigation of unknown negative impacts with the best available technology," it provides no estimate of what amount might be appropriate.

In any event, Cortez's reclamation and mitigation responsibilities are not constrained by the amount of the contingency fund, which is ultimately in the nature of a bond guaranteeing performance of responsibilities elsewhere assumed. Bonds do not establish the limits of liability for a mining operator; they merely provide third-party guarantees (for specified amounts) that the mining operator will comply with all applicable provisions of the statutes, regulations, and conditions of the approved plan of operations. But, the amount guaranteed is not the limit of the mining operator's liability. Should, at some future date, the amount deposited in the contingency fund prove to be inadequate, recourse against Cortez directly would not be foreclosed. Since GBMW has failed to provide this Board with anything beyond vague generalities alleging inadequate capitalization of the contingency fund, this Board has no basis for specifying a higher level of bonding and we accordingly decline to do so.

In view of the foregoing, we must reject appellant's various arguments and affirm the approval of the plan of operations for the Pipeline mine.

fn. 4 (continued)

were exceeded with respect to maximum concentrations for fluoride, TDS, iron, manganese, mercury, and silver. See FEIS at 3-28. With respect to the bedrock aquifer baseline, drinking water standards were exceeded for the average concentrations for fluoride and TDS, while they were exceeded in maximum concentrations for fluoride, TDS, sulfate, arsenic, iron, lead, and manganese. Id.

^{5/} While the FEIS cited NAC 445.24342(1)(c) as the applicable provision (see FEIS Vol. II at I-29 to I-30), the cited language is now found, as indicated in the text of this opinion, at NAC 445A.4241(c).

The FEIS and BLM's decisional process more than adequately dealt with the concerns which appellant raised and appellant has provided no basis which would justify this Board in substituting its judgment for that of the officials of the State Office. See Oregon Natural Desert Association, 125 IBLA 52, 60 (1993).

[3] As noted above, during the pendency of GBMW's challenge to the approval of the Pipeline plan of operations, Cortez sought and obtained approval of an amendment of the plan of operations to permit the construction and operation of an additional 70 infiltration basins totalling 235 acres on public and private lands. See Decision of June 17, 1997. Appeals from this decision were filed by both GBMW and WSRI. It is to these appeals which we now turn.

In denying requests for stay filed by GBMW and WSRI, the Board described the genesis of this second controversy:

The record indicates that the request for this plan amendment, which was originally filed with BLM on June 3, 1997, and finalized on June 9, 1997, was occasioned by problems associated with pit dewatering at the Pipeline Gold Mine. These problems were, in turn, generated by a combination of lower than expected infiltration rates at the existing 126 acres of infiltration ponds, an accelerated mining schedule implemented by Cortez, and several weeks of unusually rainy weather. This combination of circumstances resulted in a 100-percent utilization rate at the existing ponds and necessitated a reduction in the pumping rate at the pit which permitted a concomitant rise in the ground water table so that it approached the pit floor. See BLM-Cortez Coordination Meeting, June 12, 1997, Minutes at 1.

On June 17, 1997, the plan amendment was formally approved by BLM subject to three special stipulations. It was further noted that, with the approval of the Nevada Division of Environmental Protection (NDEP), bonding requirements had been increased by \$1,090,300, and that an Administrative Decision had been made (NV063-AD97-064) that the proposed action was in conformance with Environmental Impact Statement (EIS) N64-EIS94-65. Finally, it was noted that NDEP had issued the necessary permits to permit construction of the new infiltration ponds. Subsequent to the approval of the amendment, GBMW and WSRI filed their appeals and sought an order staying action under the amendment.

(Order of September 24, 1997, at 2.)

Appellants challenge BLM's action on the ground that, in approving the plan amendment at issue, BLM failed to adequately consider the impact on

groundwater recharge of increasing the surface area of recharge ponds. 6/ Appellants argue that the net loss to recharge occasioned by the increased surface area of the reinfiltration ponds was inadequately analyzed by BLM and is beyond the scope of analysis of the proposed action as provided in the FEIS. Thus, they requested that the Board set aside BLM's decision pending the completion of further environmental analysis of the impact of the proposed amendment.

We think that there is no question that the approved amendment will result in an increase both in the reinfiltration pond surface area and in the resulting evaporative loss above that which the FEIS estimated would likely occur under the proposed action. Appellants point out that the FEIS concluded that the amount of evaporation expected from the reinfiltration ponds was 2.5 million gallons per year (see FEIS at 4-22), and they argue that the loss under the plan amendment would be of a substantial magnitude greater. Both BLM and Cortez respond, however, by arguing that the FEIS figure on which appellants rely is clearly erroneous. They support this assertion by noting that the actual study prepared by Water Management Consultants (WMC), entitled Results of Expanded Groundwater Model and Support Documentation, concluded that "a loss of approximately 33-61 million gallons per year (average 63-116 gpm) would occur from an open water surface of 28-52 acres," as provided in the proposed plan. Id. at 78. They suggest that the FEIS figure is either the result of a miscalculation or an editorial mistake. See BLM Answer at 5; Cortez Answer at 13-14.

From our review of the record, there seems little question that the figures appearing in the FEIS are erroneous and that the underlying studies clearly contemplated evaporative losses related to the reinfiltration ponds to be far in excess of the 2.5 million gallons per year figure provided in the FEIS. 7/ But, even emending the FEIS to accurately reflect

6/ While GBMW argues, based on the total acreage involved, that the BLM decision essentially triples the pond surface subject to evaporation, both BLM and Cortez point out that GBMW is using the total surface area set aside for disturbances associated with the reinfiltration system, including access roads, areas for topsoil stockpiles, and water conveyance systems. See Cortez Answer at 16 and Ex. A at 2; BLM Answer at 5. We note, however, that Cortez estimates that, should reinfiltration continue at the rate of 1.5 feet per day, a total pond surface of 88.6 acres would be required and that a water surface of this dimension would result in an evaporative loss of 212 gpm or 342 acre feet per year. See Cortez Answer, Ex. A at 3.

7/ We would point out, however, that while GBMW and WSRI rely on figures appearing in the text of the FEIS which misstate expected evaporation data, Cortez seemingly relies on a BLM response to a comment on the proposed EIS which also provides data for which no analytical basis can be discerned. Thus, Cortez argues that, even assuming an evaporative loss of 342 acre feet per year, this is an increase of only 14 percent over the "annual evaporative loss set forth on page F-39 of the FEIS." (Cortez Answer at 15.)

the underlying studies, the fact remains that pond surface area might be expected to increase from an estimated maximum of 52 acres to a total of 88.6 acres, ^{8/} with total evaporative losses increasing from an estimated maximum of 116 gpm to 212 gpm. See note 6, supra. The question which remains is whether this increase in evaporative loss is of a magnitude sufficient to require further environmental analysis as a precondition to approval of the plan amendment.

In analyzing this last issue, it is important to keep in mind that, in the context of the plan of operations, evaporative loss from the surface of the reinfiltration ponds is merely one component of the consumptive use of water envisioned by the plan. All consumptive uses of water resulting from the plan of operations (evaporation from the surface of the pond, use of water in mining and milling, water for dust control etc.) equally impact the question of recharging the groundwater supply since each represents a net loss to recharge. The FEIS clearly assumed that total consumptive use would aggregate 2,000 gpm. See, e.g., FEIS at 2-14, 4-22. This, in itself, constitutes only half the consumptive uses affecting the Crescent Valley groundwater balance and compares to an estimated loss for evapotranspiration of 20,000 gpm. See FEIS, Figure 3.4-6. Cortez notes that, even at the increased levels of evaporation resulting from its plan amendment, the mining operations continue to proceed below the 2,000 gpm consumptive rate analyzed in the FEIS. See Cortez Answer at 13, Ex. A at 3. Thus, the effects on groundwater recharge resultant from evaporation under the plan amendment have already been considered in the FEIS.

fn. 7 (continued)

It is true that the FEIS response averred that "[u]sing the proposed design area of 80 acres and applying an average evaporative rate of 44 inches/year from a free water surface for this region of Nevada, the annual evaporative loss from the infiltration pond areas would be approximately 300 acre feet/year or would average about 186 gpm." (FEIS, Vol. II at F-39.) The problem is that, as the WMC study makes clear, the proposal analyzed encompassed pond surface acreage varying from 28 to 52 acres. It did not include analysis of surface pond acreage of 80 acres. It is clear that the FEIS response was based merely on a multiplication of pond surface acreage by estimated yearly evaporative loss (44 feet). An annual evaporative loss of 300 acre feet per year from the reinfiltration ponds was not included in the analysis of likely effects of the proposed action. Thus, the increase represented by the amendment is, in fact, on the order of more than 82 percent above the maximum evaporative loss ascribed to the reinfiltration ponds in the WMC study.

^{8/} In its response to GBMW's request for a stay, Cortez suggested that the Rocky Pass facility which was constructed pursuant to the amendment under appeal was operating at a reinfiltration rate of 4 feet per day and that it expected that "the average rate of the entire facility can significantly exceed the current 1.5 feet per day." (Cortez Response to GBMW Stay Request at 8.) This assertion, however, was not repeated in its Answers to the GBMW and WSRI appeals and, in light of subsequent filings relating to a supplemental plan amendment to further increase the number of reinfiltration ponds, it seems unlikely that Cortez's expectations were realized.

Appellants raise a number of subsidiary issues relating to operations under the original plan and projected operation under the plan amendment. Many of these issues were concerns identified in the FEIS. None of appellants' arguments, however, directly relate to the question of the effect of increased evaporation due to expanded pond surface acreage on groundwater recharge. At best, they delineate operational problems which might or might not develop in the future. They provide no basis for reversing BLM's decision to approve the plan amendment.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the decisions approving the initial plan of operations for the Pipeline mine and the amendment allowing the opening of additional reinfiltration ponds are affirmed.

James L. Burski
Administrative Judge

I concur:

T. Britt Price
Administrative Judge

